



## Meeting Today's Challenges

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**Better  
Faster  
Cheaper  
Safer  
Smarter**



## Michigan DOT Efficiencies and Innovations

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MDOT: Providing the highest quality integrated transportation services for economic benefit and improved quality of life.

# Michigan DOT Efficiencies and Innovations

State fuel tax revenue has been declining since 2004. Revenue is down **\$224 million** since then, while the cost of doing business has increased. The state is collecting approximately the same amount of transportation revenue in 2011 as it did in 1999. In fiscal years 2011 and 2012, short-term solutions were used to enable the state to match federal funds, ensuring that no federal money was left on the table. MDOT has undertaken numerous efforts to operate more efficiently and find every available dollar in its budget for infrastructure.

**Efficiencies implemented include:**

- **\$48.1 million** saved by reducing staff by 15 percent and closing eight offices or facilities.
- **\$8 million** saved per year in staff time as a result of various process improvements.
- **\$4 million** saved per year by using electronic and energy-efficient technology.
- **\$933,000** saved by implementing innovative winter maintenance practices in order to maximize efficiency.
- **\$100,000** saved per year by simplifying accounting processes.

MDOT also is undertaking **innovative cost-saving measures** to reduce operating costs, extend the life of projects, or maximize energy efficiency. Examples include:

- Best-value contracting methods.
- New material mixes, such as warm-mix asphalt.
- Pre-cast bridges for quicker construction.
- Carbon-fiber components to extend the life of a bridge.
- Using recycled concrete and asphalt in construction.
- Coordinating projects and maintenance with other agencies to minimize redundancies.
- Context sensitive solutions and stakeholder engagement to improve project benefits overall.
- “Bridge in a Backpack,” a pilot project expected to reduce reconstruction cost by two-thirds, create one-third less carbon footprint, reduce construction time by more than half, and provide a longer-lasting bridge.

MDOT will continue to take relentless, positive action to maximize its resources by finding efficiencies and incorporating them into its business practices to support the MDOT mission: “Providing the highest quality integrated transportation services for economic benefit and improved quality of life.”

One-time Savings		2011 Savings	
Build America Bonds		STF	
MDOT determined to use the Build America Bonds in lieu of traditional bonding	\$22 million	Savings in the State Trunkline Fund (STF)	\$48.1 million
CTF Bond Restructuring		CTF	
MDOT restructured CTF bonds to improve cashflow for transit capital for three years	\$41 million	Savings in the Comprehensive Transportation Fund (CTF)	\$4 million
Process Improvements		Aeronautics	
MDOT identified several processes that underwent a "process improvement" review such as the "call for projects" and the Congestion Mitigation and Air Quality Improvement (CMAQ) Program	\$8 million	Savings in the Aeronautics Fund	\$2.9 million
Total one-time savings	\$71 million	Total	\$55 million